

Title (en)

PROCESS FOR DETECTING AND ELIMINATING THE SHADOW OF MOVING OBJECTS IN A SEQUENCE OF DIGITAL IMAGES.

Title (de)

VERFAHREN ZUR DETEKTION UND ABSPALTUNG DES SCHATTENS SICH BEWEGENDER OBJEKTE IN EINER DIGITALEN BILDSEQUENZ.

Title (fr)

PROCEDE DE DETECTION ET D'ELIMINATION DE L'OMBRE D'OBJETS EN MOUVEMENT DANS UNE SEQUENCE D'IMAGES NUMERISEES.

Publication

EP 0669034 A1 19950830 (DE)

Application

EP 93924012 A 19931102

Priority

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- DE 9301043 W 19931102

Abstract (en)

[origin: WO9411852A1] In a process for detecting and eliminating the shadow of moving objects in a sequence of digital images, a sequence of background images is first derived from a sequence of images. The sequence of background images contains only the immovable background image of the sequence of images, but not the moving objects. The object contours are then extracted from the sequence of images by determining a contour halftone image for each image of the sequence of images and for the respective background image of the sequence of background images. By vertical or horizontal projection of said contour halftone images, vertical or horizontal contour histograms are determined for each contour halftone image. Contours which do not belong to the moving objects or to the shadow of the moving objects are eliminated by subtracting the contour histograms of the background images from the respective contour histograms of the images of the sequence of images taken at the same moment. The differential contour histograms thus obtained are subjected to threshold value discrimination in order to eliminate the contours which do not correspond to the actual moving objects but to the shadow of a moving object.

IPC 1-7

G08G 1/015; G08G 1/04; G06F 15/70

IPC 8 full level

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CPC (source: EP US)

G06T 7/246 (2016.12 - EP US); **G06V 10/273** (2022.01 - EP US); **G06V 20/54** (2022.01 - EP US); **G08G 1/015** (2013.01 - EP US); **G08G 1/04** (2013.01 - EP US)

Citation (search report)

See references of WO 9411852A1

Citation (examination)

- PROCESSING DALLAS, APRIL 6-9, 1987 KOBATAKE ET AL. "MEASUREMENT OF TWO-DIMENSIONAL MOVEMENT OF TRAFFIC BY IMAGE PROCESSING" PP 614-617.
- TREIZIEME COLLOQUE SUR LE TRAITEMENT DU SIGNAL ET DES IMAGES JUAN-LES-PINS, SEPTEMBER 16-20 1991 PINEAU ET AL. " DETECTION ET SUIVI D'OBJETS PAR ANALYSE DE SEQUENCES D'IMAGES ", PP1125-1128

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